

CLAIMS

1. A cable-passage system between the body and a door (1) of a motor vehicle, of the type provided with a flexible sheath (5) through which the electric cables (7) pass and the ends of which are joined respectively to an edge wall (11) of the door and to a fixed wall (2) of the body, the said sheath being provided with an axially extensible part (51), one end (54) of which is fixed to the body and the other end (52) is connected to the edge wall of the door on the border of a cable-passage orifice (12) cut into the said edge wall, in such a manner that the said extensible part (51) of the sheath becomes longer when the door (1) is opened,

characterized in that the sheath (5) is prolonged beyond the end of the axially deformable part that is fixed on the body, via a part (53) which is deformable in flexion and the end (56) of which is joined to the body at the level of the cable passage in the body wall, and the cables have sufficient free length (72) inside the door such that they can slide into the said sheath to absorb the length variations thereof during pivoting of the door.

2. A cable-passage system according to claim 1, characterized in that the axially extensible part (51) is corrugated and has a conical general shape, which flares out on the door side.

3. A cable-passage system according to one of claims 1 and 2, characterized in that the end (56), joined to the body, of the part (53) of the sheath that is deformable in flexion, is connected to a first connecting element (32) of an

electrical connector (3) suitable for being coupled with a second connecting element (31) of the connector, which is fixed permanently on the body wall (2).

4. A cable-passage system according to one of claims 1 to 3, characterized in that the end of the axially deformable part (51) is fixed on the body wall (2) by a fixation member (6) rigidly connecting a flange (54) integral with the sheath to the body wall (2).

5. A cable-passage system according to claim 4, characterized in that the flange (54) is formed in one piece with the sheath (5).

6. A cable-passage system according to claim 4, characterized in that the fixation member (6) is fixed on the body wall by an elastic sleeve-joint arrangement.

7. A cable-passage system according to claim 4, characterized in that the fixation member is a bracket (61) that clamps the sheath (5), two lugs (62) of the bracket passing into respective holes (55) of the flange before it is clipped into the body wall.

8. A cable-passage system according to claim 4, characterized in that the end of the sheath on the door side is provided with a groove that is countersunk into the border of the passage opening (12) cut into the edge wall (11) of the door to keep the sheath fixed in sealed manner on the said edge wall.

9. A cable-passage system according to claim 4, characterized in that the cables (7) emerging from the sheath on the door side slide freely into the axially deformable part (51) of the sheath (5) and are fixed inside the door with a free length (72) between the point (71) of fixation in the door and the end of the sheath fixed on the door that is sufficient to permit elongation of the sheath without pulling on the cables during opening of the door.

10. A motor vehicle provided with at least one door (1) equipped with electric devices, characterized in that it is provided with a cable-passage system according to one of the preceding claims.